

CLAIMS

1. A window assembly comprising:
 - a window frame having a lower portion;
 - a window sash constructed to be positioned within said window frame and capable of moving from a closed position to an open-tilted position and vice versa;
 - a pair of parallel pivot pins on said window sash;and
 - a pair of kidney shaped receptacles disposed within said window frame which accommodate movement of said window sash from its said closed position to its said open-tilted position and vice versa.
2. The window assembly of claim 1 wherein said window sash is in said open-tilted position when said window sash cooperates with said window frame so that said window sash abuts the window frame at its lower portion to limit the extent of the open-tilted position.
3. The window assembly of claim 1, wherein at least one parallel pivot pin of said pair of parallel pivot pins is retractable.
4. The window assembly of claim 1, wherein said window frame further comprises at least one insertion channel connected to at least one kidney shaped receptacle of said pair of kidney shaped receptacles to permit said window sash to be inserted into said frame in a tilted position when a parallel pivot pin of said pair of parallel pivot pins engages said insertion channel and said window frame moves down into a fully inserted position.
5. The window assembly of claim 2, wherein said lower portion of said window frame includes a water dam,

and said window sash engages said water dam to define a maximum open-tilted position.

6. The window assembly of claim 5, wherein said water dam further comprises an angled portion for supporting said window sash.

7. The window assembly of claim 1, wherein said window sash further comprises a sash mating surface, and said window frame further comprises a frame mating surface; said sash mating surface arranged and constructed so as to be complementary to said frame mating surface.

8. The window assembly of claim 1, wherein said window sash further comprises a sash stop, said sash stop engaging a surface of said window frame when said window sash is in said open-tilted position so as to limit the maximum open-tilted position of said window sash.

9. The window assembly of claim 8, wherein said surface is a cam-like curved surface.

10. A window assembly comprising:

a window frame;

a window sash having a connection means to said window frame so as to allow said window sash to attain a plurality of positions within said window frame, including an open-tilted and closed position;

a supporting means for supporting said window sash in an open-tilted position;

said window frame further comprising a pair of kidney shaped channels to receive said connection means.

11. The window assembly of claim 10, wherein said connection means is a pair of pivot pins.

12. The window assembly of claim 11, wherein said pivot pins are retractable.

13. The window assembly of claim 10, wherein said connection means includes a water dam.

14. The window assembly of claim 10, wherein said window sash further comprises a sash stop, and said means for supporting said window sash in said open-tilted position includes said sash stop.

15. The window assembly of claim 10, wherein an insertion channel connects to at least one kidney shaped channel of said pair of kidney shaped channels.

16. The window assembly of claim 10, wherein said window sash further comprises a sash mating surface, and said window frame further comprises a frame mating surface; said sash mating surface arranged and constructed so as to be complementary to said frame mating surface.

17. A window assembly comprising:

a window frame;

a window sash having an open-tilted position and a closed position, said window sash arranged and constructed to be positioned within said window frame so as to be capable of moving from a closed position to an open-tilted position and vice versa, said window sash further comprising a pair of pivot pins;

a dual function water dam, said water dam limiting the amount of water permitted to enter a building through said window assembly, and said water dam providing support to said window sash when said window sash is in its open-tilted position; and

a pair of channels located on said window frame that are arranged and constructed for receiving said pair of pivot pins to accommodate movement of said window sash from its closed position to its open-tilted position and vice versa.

18. The window assembly of claim 17, wherein said pair of pivot pins are retractable.

19. The window assembly of claim 17, wherein said pair of channels are kidney shaped channels.

20. The window assembly of claim 19, wherein said window frame further comprises an insertion channel, said insertion channel connecting to at least one kidney shaped channel of said pair of kidney shaped channels.

21. The window assembly of claim 17, wherein said window sash further comprises a sash mating surface and said window frame further comprises a frame mating surface, said sash mating surface arranged and constructed so as to be complementary to said frame mating surface.

22. A window assembly comprising:

a window frame having a first horizontal arm, a second horizontal arm, a first vertical arm, and a second vertical arm;

an opening in said window frame;

a window sash comprising a first horizontal sash rail, a second horizontal sash rail, a first vertical sash rail, and a second vertical sash rail,

said window sash arranged and constructed for insertion into said opening of said window frame; said window sash having a plurality of angular positions within said window frame, including an open-tilted position and a closed position;

a connecting means for connecting said window sash and said fixed window frame;

a first channel located on a first vertical arm, and a second channel located on a second vertical arm, said first and second channels being in the shape of a kidney and capable of receiving said connection means; and

a support means for supporting the window sash in said open position.

23. The window assembly of claim 22, wherein said support means is a water dam.

24. The window assembly of claim 22, wherein said window sash further comprises a window sash stop, and said support means includes said window sash stop.

25. The window assembly of claim 22, wherein an insertion channel connects to either or both said first and said second channel.

26. The window assembly of claim 22, wherein said connection means for connecting said window sash and said fixed window frame is a single pair of pivot pins.

27. The window assembly of claim 26, wherein at least a pivot pin of said single pair of pivot pins is retractable.

28. The window assembly of claim 22, wherein said window sash further comprises a sash mating surface and said window frame further comprises a frame mating surface; said sash mating surface arranged and constructed so as to be complementary to said frame mating surface.

29. A window assembly comprising:

a window frame having a first and second horizontal arm, and a first and second vertical arm;

a kidney shaped channel located in at least one vertical arm of said fixed window frame;

a window sash having a first and second horizontal sash rail, and a first and a second vertical sash rail, said window sash arranged and constructed so as to be inserted into said window frame, said window sash having an open position and a closed position, said window sash further having a pivot pin located in a vertical sash rail so as to be received by said kidney shaped channel; and

a support means for supporting said window sash when said window sash is in an open position.

30. The window assembly of claim 29, wherein said support means includes a water dam.

31. The window assembly of claim 29, wherein said window sash further comprises a window sash stop, and said support means includes said window sash stop.

32. The window assembly of claim 29, wherein an insertion channel connects to said kidney shaped channel.

33. The window assembly of claim 29, wherein said pin is retractable.

34. The window assembly of claim 29, wherein said window sash further comprises a sash mating surface and said window frame further comprises a frame mating surface; said sash mating surface arranged and constructed so as to be complementary to said frame mating surface.

35. The window assembly as in claim 1, wherein the only connection between said window sash and said frame is the parallel pivot pins, such that the sash can be easily removed from the frame.

36. The window assembly as in claim 17, wherein the only connection between said window sash and said frame is the parallel pivot pins, such that the sash can be easily removed from the frame.

37. The window assembly as in claim 18, wherein the only connection between said window sash and said frame is the parallel pivot pins, such that the sash can be easily removed from the frame.

38. The window assembly of claim 11, wherein the only connection means between said window sash and said frame is the pair of pivot pins, such that the sash can be easily removed from the frame.

39. The window assembly of claim 26, wherein the only connection means between said window sash and said

frame is the single pair of pivot pins, such that the sash can be easily removed from the frame.

40. The window assembly of claim 29, wherein the only connection between said window sash and said frame is the pivot pin such that the sash can be easily removed.